

Staff Report

RESOLUTION APPROVING THE PURCHASE OF AN EMERGENCY STANDBY GENERATOR FOR THE SAN JUAN PUMP STATION FROM COLLICUTT ENERGY SERVICES FOR AN AMOUNT NOT TO EXCEED \$72,365.12

Honorable Mayor and Council Members:

Summary

Staff is requesting Council approval for the purchase of an emergency standby generator for the San Juan Pump Station from Collicutt Energy Services.

Background

The City of Belmont has eleven sanitary sewer pumps station located throughout the City. These pump stations are used to pump untreated sewage. The San Juan Pump Station is our largest sanitary sewer pump station and was originally built in 1953 and is located next to Laurel Creek at 3118 East Laurel Creek Road. It pumps on average 300,000 gallons per day when dry and up to 1,250,000 gallons per day during a heavy rain storm.

The station was rehabilitated in 1997. As part of that project two larger 120 horsepower pumps were installed to increase pumping capacity. The station's existing 230KW (kilowatt) emergency generator that was installed in 1978 was not replaced to meet the new electrical demands of these larger pumps. These larger 120 horsepower pumps require a 400KW generator to operate. Public Works plans to replace the existing 230KW generator with a 400KW generator and place it in the same location inside the pump station. This 400KW generator will ensure adequate power to fully operate the station as it is configured now, as well as handle future pump upgrades that may occur.

The San Juan Pump Station experienced a power outage that lasted for more than ten hours during the January 4, 2008 storm. The existing undersized generator struggled to supply adequate power to the station. City staff worked with an outside vendor and spent most of the day making adjustments to keep one pump operational. During periods of high flow into the pump station both pumps need to run to keep up with the increased flow. Should these pumps fail to operate, the sewage from the station's wet well would overflow into Laurel Creek. The San Juan Pump Station has experienced three power outages within a twelve month period. None of the power outages resulted in a sanitary sewer overflow. Staff worked with an outside vendor on each occasion to ensure one pump was kept running on standby power.

The State and Regional Water Quality Control Boards recently required every City to develop and implement a Sanitary Sewer Overflow Emergency Plan. As part of this plan, each municipal agency shall take necessary steps to reduce the likelihood of sanitary sewer overflows. By insuring that this pump station has an adequate uninterruptible emergency power source, the City will greatly reduce the risk of a sanitary sewer overflow from occurring at this pump station.

The existing 230KW diesel powered generator is tier 0 (pre emission standards). The new 400KW diesel powered generator meets both the EPA (Environmental Protection Agency) and CARB (California Air Resources Board) PM (particulate matter) tier 3 emission standards. This is the highest (cleanest) emission standard for this size of generator. Staff has also checked with the BAAQMD (Bay Area Air Quality Management District) and they have approved this generator with no additional exhaust emission after treatment devices.

Staff also looked at other fuel sources for the emergency generator such as natural gas and propane. Natural gas is piped into the generator and in the event of an earthquake this line could break and cause the fuel supply to be interrupted. This interruption of fuel delivery would prevent

the generator from running. Propane fuel requires a large tank to provide an adequate fuel reserve. This large tank increases the overall cost of the generator, increases the overall size of the pump station and increases the risk of fire and or explosion. In addition, both natural gas and propane fueled generators produce more NOx (oxides of nitrogen) and CO (carbon monoxide) emissions than the new emission compliant diesel engines.

Discussion

City staff in conjunction with an electrical engineering consultant developed specifications for the new generator at the San Juan Pump Station that will be adequate to fully operate the station during a power outage. City staff provided specifications for the generator to three vendors and three quotes were received. The lowest bidder was Collicutt Energy Services.

QUOTE CHART

VENDOR	GENERATOR BID PRICE	
Collicutt Energy Services	\$72,365.12	
Bayside Equipment	\$85,246.87	
California Diesel	\$86,600.00	

General Plan/Vision Statement

No impact.

Fiscal Impact

The total purchase price for the generator is \$72,365.12 including sales tax. The monies necessary are included in the 2007-08 Sewer Rehabilitation Annual Program, Account No. 503-4326-7003-9030.

Public Contact

Posting of the City Council agenda.

Recommendation

Staff recommends approving the purchase of the emergency generator from Collicutt Energy Services for an amount not to exceed \$72,365.12

Alternatives

- 1. Deny Resolution.
- 2. Refer back to staff for further information.

Attachments

A. Resolution

Respectfully	submitted,
--------------	------------

Randy Ferrando	Raymond E. Davis III, PE, PTOE	Jack R. Crist	
Public Works Services Manager	•	City Manager	

Staff Contact:
Randy Ferrando
Public Works Services Manager
rferrando@belmont.gov
650 595-7464

RESOLUTION NO.	
----------------	--

RESOLUTION OF THE CITY COUNCIL OF THE CITY OF BELMONT APPROVING THE PURCHASE OF AN EMERGENCY STANDBY GENERATOR FOR THE SAN JUAN PUMP STATION FROM COLLICUTT ENERGY SERVICES FOR AN AMOUNT NOT TO EXCEED \$72,365.12

WHEREAS, the existing 230 KW emergency generator located at the San Juan Pump Station is undersized; and,

WHEREAS, the State and Regional Water Quality Control Boards requires every City to develop and implement a Sanitary Sewer Overflow Emergency Plan to reduce the likelihood of sanitary sewer overflows; and,

WHEREAS, by insuring that pump stations have an uninterruptible power source, the City will greatly reduce the risk of a sanitary sewer overflow occurring at the pump station; and,

WHEREAS, the City staff in conjunction with the electrical engineering consultant developed specifications for the new generator that will operate the pump station during power outages; and,

WHEREAS, the City staff has provided specifications for the generators to three vendors and three quotes were received; and,

WHEREAS, funding shall be from the FY2007/08 Sewer Rehabilitation Annual Program, account 503-4326-7003-9030.

NOW, THEREFORE, BE IT RESOLVED that the City Council of the City of Belmont approves the purchase of the 400 KW emergency standby generator for the San Juan Pump Station from Collicutt Energy Services an amount not to exceed \$72,365.12.

MAYOR of the City of Belmont